

What is claimed is:

1. An image signal encoding device comprising at least encoding means of dividing a luminescence signal and color-difference signals of image signals into macro blocks having a plurality of sub macro blocks and encoding data of the macro blocks with use of any one of a plurality of compression modes of which compression rate is different each other,

wherein the total numbers of sub macro blocks in said each macro block are the same for the use of said all kinds of compression modes.

2. The image signal encoding device according to Claim 1, wherein in said macro block, the ratio between sub macro blocks of said luminescence signal and sub macro blocks of said color-difference signals varies depending on said each compression modes.

3. An image signal encoding device comprising at least encoding means of dividing a luminescence signal and color-difference signals of image signals into units of macro block having a plurality of sub macro blocks, and encoding data in the macro block;

placing means of placing encoded data into sync blocks each having a predetermined number of sub sync blocks each assigned a predetermined initial amount of codes,

wherein said placing means arranges the assignment of said predetermined initial amount of codes to each said sub sync block in said sync block so that that for said sub sync block of said color-difference signal of red color is different from that for said sub sync block of said color-difference signal of blue color.

4. The image signal encoding device according to Claim 3, wherein the assignment of said predetermined initial amount of codes to each said sub sync block in said sync block is defined so that that for said sub sync block of said color-difference signal of red color is greater than that for said sub sync block of said color-difference signal of blue color.

5. The image signal encoding device according to Claim 3, wherein the assignment of said predetermined initial amount of codes to each said sub sync block in said sync block is defined so that that for sub sync block of said color-difference signal of red color equals that for sub sync block of said luminescence signal.

6. The image signal encoding device according to Claim 3, wherein the assignment of said predetermined initial amount of codes to each said sub sync block in said sync block is defined so that the ratio thereof among sub sync block of said luminescence signal and sub sync block of said

color-difference signal of red color and sub sync block of said color-difference signal of blue color is 5 : 5 : 4.

7. The image signal encoding device according to any one of Claims 1 to 6, further comprising rate converting means of switching a kind of rate conversion with band limitation applied to said image signals, in accordance with the type of said compression mode,

wherein said encoding means equalizes the compression rates of said image signals subjected to rate-conversion, in all said compression modes.

8. An image signal encoding method comprising at least an encoding step of dividing a luminescence signal and color-difference signals of image signals into macro blocks having a plurality of sub macro blocks, and encoding data of the macro blocks with use of any one of a plurality of compression modes of which compression rate is different each other,

wherein the total numbers of sub macro blocks in said macro block are the same for the use of said all kind of compression modes.

9. The image signal encoding method according to Claim 8, wherein in said macro block, the ratio between sub macro blocks of said encoded luminescence signal and sub macro blocks of said encoded color-difference signals varies depending on said each compression modes.

10. An image signal encoding method comprising at least an encoding step of dividing a luminescence signal and color-difference signals of image signals into units of macro block having a plurality of sub macro blocks, and encoding data in the macro blocks;

placing steps of placing encoded data into sync blocks each having a predetermined number of sub sync blocks each assigned a predetermined initial amount of codes,

wherein in said placing step, the assignment of said predetermined initial amount of codes to each said sub sync block in said sync block is arranged so that that for said sub sync block of said color-difference signal of red color is different from that for said sub sync block of said color-difference signal of blue color.

11. The image signal encoding method according to Claim 10, wherein the assignment of said predetermined initial amount of codes to each said sub sync block in said sync block is defined so that that for said sub sync block of said color-difference signal of red color is greater than that for said sub sync block of said color-difference signal of blue color.

12. The image signal encoding method according to Claim 10, wherein the assignment of said predetermined initial amount of codes to each said sub sync block in said sync block is defined so that that for sub sync block of said color-difference

signal of red color equals that sub sync block of for said luminescence signal.

13. The image signal encoding method according to Claim 10, wherein the assignment of said predetermined initial amount of codes to each said sub sync block in said sync block is defined so that the ratio thereof among sub sync block of said luminescence signal and sub sync block of said color-difference signal of red color and sub sync block of said color-difference signal of blue color is 5 : 5 : 4.

14. The image signal encoding method according to any one of Claims 8 to 13, further comprising a rate converting step of switching a kind of rate conversion with band limitation applied to said image signals in accordance with the type of said compression mode,

wherein in said encoding step, the compression rates of said image signals subjected to rate conversion are equalized in all said compression modes.

15. A program for making a computer serve as the encoding means of dividing a luminescence signal and color-difference signals of image signals into macro blocks having a plurality of sub macro blocks and encoding the macro blocks selectively in any one of a plurality of compression modes of which compressing late is different each other in the image signal encoding device according to claim 1.

